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REMARKS

Claims 1 and 9 have been amended for formality and consistency. The limitations of Claim 4, and specific surface properties discussed in paragraph 24 of the specification have been incorporated into claim 1. Claim 4 has been cancelled. No new matter has been added by these amendments.

Claims 1-20 stand finally rejected under 35 U.S.C. §102(b) as being anticipated by WO 98/15813. Applicants traverse the rejection and assert that each and every element of applicants' claimed invention as amended is not taught in the cited reference.

The Official Office Action states that the WO 98/15183 reference teaches exposing at least one reactant gas to the solid surface during the monitoring of infrared emissions. The Official Office Action concludes that this reads on the claimed contacting the adsorbent and measuring the emitted radiation and with respect to determining a surface property, the Advisory Action of July 10, 2003 states that applicants' claim language is met by the teachings of the cited reference.

Applicants traverse the conclusion of the Advisory action and maintain that the cited reference does not teach "determining at least one surface property of each of the solids using the radiation measurements." Applicants' emphasize that a *surface property* (characteristic of the surface or boundary of a material) of the solids is being determined, and that such *surface property* is being

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determined using radiation measurements. Applicants discuss surface properties in paragraph 24 (page 10) of their specification.

As discussed in applicants' June 30, 2003 response, WO 98/15183, discloses a number of characteristics that may be screened for on pages 5, 6, 16, 17, 20, 21, and 26 of the reference. However, none of those teachings anticipate applicants' requirement of determining specific surface properties, as in applicants' amended claims, using radiation measurements.

In its "Generating Arrays of Materials" section, WO 98/15183 states that "[p]roperties which can be screened for include but are not limited to, electrical, thermal, mechanical, morphological, optical, magnetic, chemical, conductivity, super-conductivity, resistivity, thermal conductivity, anisotropy, hardness, crystallinity, optical transparency, magnetoresistance, permeability, frequency doubling, photoemission, coercivity, dielectric strength, or other useful properties..." This is a recitation of an ambiguous series of large categories of properties without any additional specificity or detail. There is no indication that the properties listed refer to surface properties, which are of course quite different from bulk properties. Furthermore, applicants have amended Claim 1 to recite the surface properties of relative adsorptivity, number of acid sites, acid site distribution, acid site energy, acid site strength, acid site strength distribution, base site strength, number of base sites, base site distribution, porosity, pore size, pore density, pore volume, pore shape, surface area, metal dispersion, exposed metal surface area, mobility of metals on the surface of a solid, chemisorb properties, physisorb properties, adsorption selectivity, desorption

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selectivity, ion-exchange capacity, and combinations thereof, which are not taught in the cited reference.

With the cited reference failing to disclose the specific surface properties found in Claim 1 of applicants amended claims, the *prima facie* case of anticipation must fail and applicants' request that the rejection promulgated under 35 U.S.C. §102(b) be withdrawn. Accordingly, in view of the above amendments and remarks, this application is now believed to be in a condition for an allowance of all claims and such action is respectfully requested.

Respectfully submitted,



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